



# THE BENEFIT OF MANAGEMENT INFORMATION SYSTEM NEW E-GOVERNMENT ARCHITECTURE IN BANGLADESH

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<b>Received:</b> 7 <sup>th</sup> December 2020 <b>Accepted:</b> 27 <sup>th</sup> December 2020 <b>Published:</b> 8 <sup>th</sup> January 2021	Digital Bangladesh is a notion which involves the use of ICT for management, administration and governance to make sure transparency, accountability and answerability at all tiers of human beings and state. Without the enhancement of ICT sector, the dream of a Digital Bangladesh would be totally a nightmare for the inhabitants. ICT is moreover a combination of bodily shape and brain. Computers, Network equipment, Software, Wire and Wireless Connectivity Systems, Broadcast Hardware and many other Hardware and Accessories are the bodily structure. The qualified men and woman at the again of the form act as the brain. To materialize the concept of digital Bangladesh, improvement of country wide shape and a big vast range of qualified human resources are the necessary. In this paper, we have proposed an advantageous Information System Model for implementing electronic governance (e-governance) and e-services in Bangladesh which is in an innovative and prescient of developing into 'Digital Bangladesh'. We have also analyzed the vision of Digital Bangladesh and the want of e-governance for conducting that vision. Our Information system mannequin courses the improvement of the new e-government structure and managing the challenges of growing e-governance in Bangladesh emphasizing on the utilization of reachable assets and facilitating e-services in greater than a few sectors of government. In addition, we provide unique pointers for creating e-governance in the most feasible, cost-effective, and environment friendly manner.

**Keywords:** E-Service, Information System, Database, e-Government.

## 1. INTRODUCTION

Information and Communication Technology (ICT) and the rapid improvement of Technological advances lead the age of Information and Digital revolution. This revolution has made a significant have an effect on social, political, instructional and cultural livelihood of mass human beings which took the complete world into a distinctive era. Bangladesh, being one of the growing worldwide locations taking attempts strongly for constructing the u. s. a. by way of ability of coming into global frontier by way of ICT. So, a platform has been delivered for interaction amongst the Government, Businesses and residents that assures trouble-free, accessibility and availability of statistics to all ranges of the society. Implementation of 'Digital Bangladesh' was once as soon as an election promise capability fantastic use of science to materialize all the commitments of the government consisting of the ones regarding education, health, employment and poverty mitigation. The key intention at the back of this notion is to beautify the requirements of livelihood of the residents through way of empowering them, making certain transparency and accountability in each and each and every vicinity of life, and putting up effective-governance and, above all, supply public offerings to their thresholds with the aid of the most wonderful use of ultra-modern technologies. Mainly, beautify of the attitudes with the aid of conceivable of adopting new technologies, improvement of wonderful questioning and utility of state-of-the-art powers are critical for establishing Digital Bangladesh. At the equal time, the digital-divide in a variety of areas and amongst terrible and rich, educated and uneducated, men and girl ought to be removed. Rapid improvement of records and conversation technological know-how (ICT) produces enormous opportunities for efficient and fee incredible public carrier delivery. The implementation of 'Digital Bangladesh' will ensure the purpose of redesigning Bangladesh into a middle-income u. s. via 2021. This vision, at the same time with many imaginative enterprises, will lead the u. s. a. nearer to greater and sustainable boom path. For actualization of the Vision 2021, the Government targets to set up a Bangladesh the place present day science will be the usage of force of the financial system and take it to a larger trajectory of growth. It also wishes to exhibit its resilience in opposition to failures precipitated by the utilization of local climate alternate and quicker or later bring together a happy, prosperous and caring Bangladesh via way of advertising ICT and its top-notch use.

The quintessential developing blocks of a Digital Bangladesh consist of 4 exceptional components:

**a) To boost of Human Resource:**

The key goal is to make the satisfactory use of new utilized sciences to assemble world-class 21st century know-how in all areas of lookup about especially mathematics, science, and English language via use of more recent and low-cost transport equipment and digital mastering contents. This factor will additionally deal with supplying vocational and 'lifelong education' possibilities to the early life and adults in order to retool them and assemble more recent competencies to decorate their productiveness commensurate with the wishes of the twenty first century globalized world.

**b) Linking peoples:**

The goal of this thing is to discover a sustainable connectivity channels to make sure the benefits of Digital Bangladesh obtain the marginalized and the disadvantaged. Innovative shared get entry to outlets, recognition and functionality enhancement of nearby communities to get entry to public e-services, big improvement of local language content material and domestically relevant content, and establishing two-way channels to promote participation of grassroots in policy Discourse are key focal point areas.

**c) E-Governance for Good Service Delivery:**

The key goal of the e-Governance difficulty is to leverage ICTs in all spheres of Governance to make sure transport of services to these who are the least served. Development of a Digitized-administration platform and advent of affordable, apparent electronic-services the utilization of ICTs that are already in the fingers of tens of heaps and hundreds such as telephone phones, radio, TV in addition to net are key. Important areas to tackle are education, healthcare, agriculture, administration of land and water resources, social safety nets, regulation enforcement and judiciary and disaster management.

**d) ICT in Business:**

This component will deal with three broad troubles of Digital Bangladesh the use of ICTs to promote get right of entry to markets with the resource of the disadvantaged producers and SMEs, merchandising of ICT company through supplying services and technological know-how wished to preserve the three other aspects of Digital Bangladesh and boosting ICT as an export oriented vicinity to earn foreign places overseas change and generate employment. M-banking and digital payments as good as electronic enterprise agency transactions are few key initiatives. Digitization of Governance is clearly imperative for setting up an obvious and in cost Government and corruption-free administration. It is solely with the first-rate use of ICT that we can reap public choices to people's doorsteps economically, successfully and in a transparent manner. Digitization of Governance is in best fact the use of Information System (IS) to the matters to do of Government carrying out in order to bring up 'Simple, Moral, Accountable, Responsive, Transparent' (SMART) governance.

This would typically incorporate the use of Information System by government locations of work for any or all of the following causes:

Exchange of files with peoples, commercial enterprise business enterprise or marketers and non-government celebration or other authorities' departments, Rapid and environment nice transport of public services, upgrading home efficiency, slicing down overheads and developing revenue, reformation of administrative processes, Improving tremendous and accurateness of services. Digital Government is a major exchange and planned machine that helps and simplifies governance for parties, government, residents and businesses. In the age of the records and communication technology (ICT) Digitization of Governance can moreover use to make lifestyles on hand by capacity of ability of presenting perfect resource using intelligence, tempo and awesome utility of ICT. It is necessary to make authorities increased responsive, prompt and to make greater sustainable future for the acquirer of the entire society and world. An ideal Information laptop can understand the expected advantages of the digital Governance. A statistics gadget can be described technically as a set of interrelated factors that gather (or retrieve), process, store, and distribute information to assist choice making coordination & manipulate in an organization.

## **2.GOAL OF E-GOVERNMENT**

E-governance is described as the software of hardware, software, web and different data and conversation utilized sciences (ICT) to the functioning of authorities to carry about effective, efficient, obvious and responsible governance enabling the citizen to reap the most gain from the government. It is a complete machine for bringing an innovative alternate in the operation of the authorities thru making certain a system of fast transaction and a machine of take a appear at and balance. Electronic governance is described as the utility of records technological knowledge to the techniques of government functioning in order to increase about simple, moral, accountable, responsive and obvious (SMART) governance.

## **3.RELATED WORKS**

A lot of researchers have examined the function of e-governance in phrases of transparency and enhancement of economic system in a wide variety of countries. Most of the researches focus on the acceptance of digital functionality in management and dialog elements of governance and administration process. Duncombe (2006) contributes to hypothesize about ICT and its affiliation to enhancement via way of applying a "livelihood approach" as a form of study. It takes rural microenterprise as a huge potential vicinity of ICT software in the context of Botswana. A necessary ending of the find out about is that it offers some clue that new digital ICTs are taking section in an

essential position in the lives of the nation-state poor. There is, however, proof that as the terrible give up a lot much less poor, the extent of separation from poverty is decreased proportionately to their potential to get entry to and use ICTs. Nagi and Hamdan (2009) in their search for on Jordan got that, in compliance with the Royal vision, some coverage and initiatives have been developed to set up Jordan as a regional organizer in the areas of data and financial improvement in the region. One of these initiatives is the implementation of e-Government, which provides a range of benefits: growing new jobs in public and private sectors, decreasing illiteracy, enhancing transparency of government, effecting the growth of knowledge-based economy, and improving the shipping of choices to both residents and corporations for each authorities and society. Heeks (2001) discovered that the use of ICT can make a huge contribution to the success of true governance. E-Governance can make governance more effective and efficient, and bring benefits to creating countries. Analyzing case lookup from global locations such as the Philippines, Honduras, Chile, and South Korea, Heeks (2001) locate out about outlines three key contributions of e-governance: bettering authorities' manner (e-administration), connecting residents (e-citizens and eservices), and setting up exterior interactions (e-society). Atiqur Rahman, Journalist, discusses e-government of Bangladesh. In order to do the work, both public and non-public area ought to be made as an infusion of resources, management and ICT specially based totally development. A digital society ensures an ICT- pushed knowledge-based society where information will be without problems on hand on line and the place all possible obligations of the government, semi-government and moreover non-public spheres will be processed the usage of use of the artwork work technological data and additionally, argues that the scope e-government beneath the digital Bangladesh is no longer but clear and wide. It covers now not totally e-governance or e-commerce or e-banking, or going for walks a country-wide cellular cell phone neighborhood thru which one can get admission to the everyday newspapers or other internet devices. To make it, every location of job has to be computerized or laptop computer based. It is argued by using way of potential of Shahjahan H. Bhuiyan and examines the role that e-governance can play in the modernization of public administration for environment fine and high-quality service transport to the residents of Bangladesh, as applicable as its workable to manipulate corruption and minimize poverty. Focusing on the above statements, Sadik Hasan discusses quite a number utilized sciences have been utilized to help the unique characteristics of e-government, inclusive of electronic information interchange, interactive voice response, voice mail, email, net provider delivery, digital reality, and key public infrastructure. A coordinated effort of political leadership, bureaucrats, and private entrepreneurs ought to facilitate the appreciated enchantment in the ICT vicinity and accelerate the presence of e-government in Bangladesh. It defined e-government as "utilizing the web and the world-wide-web for turning in authorities' facts and choices to citizens." Tuomas Poysti discusses the facts law as one of the important tools of the e-government in sorts of ways and workable internationally. The creator emphasizes the data Act, criminal information, ICT detention center issues, informational justice constructions etc. The possible of e-Government practices to promote transparency has been stated with the aid of the use of N. Rashid. It explains how the software of Internet-based technologies/e-government can beneath high-quality circumstances, inspire transparency, openness and greater governance. In the present-day literature associated to implementation of electronic governance, G. Islam et al. suggest community architecture, database and software program elements for implementation of digital governance in Bangladesh. Their proposed model is based on a separate design for rural and town areas. This paper limits on the illustration of hierarchy model of infrastructure affiliation and doesn't recommend any complete structure or timeline-based implementation insurance for e-governance in Bangladesh. Sobhan et al. affords the tangible advantages of e-governance in Bangladesh with illustration of e-government readiness through a survey in. A couple of case research have in addition been based with an intention to pointing the challenges and implications of e-governance in Bangladesh. As-Saber et al. has furnished a comprehensive research about on the Information science law and e-governance from Bangladesh perspective. They core of interest on the primary issues for policy documentations of digital governance. V. Ndou gives a particular overview of e-governance and associated terminologies with comparative assessment of e-governance repute in evaluation with developed countries. The chances of digital governance have additionally been investigated in some papers which includes, Cost discount and effectivity gains, Quality of carrier transport to businesses, transparency, anticorruption, accountability attainment, make greater in the functionality of government reach, network and local introduction to Improve the terrific of choice making and promote use of ICT in distinct sectors of the society. Analyzing a volume of case research (which doesn't encompass any from Bangladesh), V. Ndou also figures out a couple of challenges in imposing e-governance. In a research, a variety of issues involving the status, attainable and obstacles for grounding digital governance adoption has been mentioned for Vietnam. Conducting an interview-based analysis; the authors have represented e-Government from demand side and have depicted the factors of getting facts for the non-users. Establish and maintain the Local Area Network (LAN) and WAN the region necessary. Units of authority's companies bought linked to sharing of facts and waft of data between particular authorities' entities. Communication community consist of each the wired and wi-fi to gain at the far-off location of the countryside. Bangladesh has already joined in the data magnificent highway. Fiber-optic based totally ICT infrastructure would be reachable soon. Bangladesh has been superior in Mobile dialog and science inclusive of introduction of 3G technological information and Smart Phones. So, while creating the country-wide large communication infrastructure, telephone network science ought to be preferred. Being a developing country, Bangladesh is now not prepared to set up e-governance in all the departments at a time. So, it is vital to Bangladesh that e-governance have to be carried out hierarchically. Govt. Sectors have to be prioritizing in phrases of usefulness, effectiveness, functionality and crook responsibility of offering services. The

wrong identification of the sectors can also in addition put at hazard the total layout of implementation of e-governance. This prioritization process ought to suppose about the interdependence and intercommunication among a range of service-providing sectors for making certain a consistent, purposeful and positive evaluation to put in stress e-governance. In the subsequent stage, Information, methodology and overall performance of each region have to be recognized, check for the feasibility and must be geared up in a structured manner so that appropriate records can be served at the time of request. It involves residents as properly as system analysts and government officials of all levels. In all departments there must be availability of personal computers, other integral IT equipment and gadget software program to all the functionaries. The use of computer structures commenced with word, Excel, electricity point and shortly accompanied with the aid of statistics processing. The technological know-how universities and awesome ICT organizations can support Information administration manner fairly through way of presenting their educated IT-experts and concerned human resource. The demand of e-Government is large sized statistics warehouses to be utilized and manipulate on account that it is a large-scale laptop consisting of developing information size. For faster, reliable and consistent database enhancement for Information system, centrally managed allotted database computer may additionally in addition be the most helpful. It is additionally required to think about net and WAP-support for all levels of sketch and improvement of options touching on e-governance. The dedication of e-Government is to incorporate the participation of the residents in decision-making, coverage making, intention selection, quickest provider delivery, improvement of right governance, corruption-free and success-oriented environment. To reap this goal, peoples have to be educated except challenge about all the sectors and services of e-governance. This dialog can be made the usage of regular verbal alternate media. SMS, MMS etc. are environment friendly equipment in speak me for the adaptation of e-governance in a wide variety of sectors. Providing citizen incentive beneficial choices and choices electronically thru e-governance may additionally bring rapid interest of the citizens. The adaptability and effectiveness of the e-governance relies upon essentially on the citizens, as they are the stakeholders of e-government. It should be taken into consideration that; the first language of Bangladesh is Bengali. So, it would be most awesome to make advantageous the use of Bengali in implementation of e- authorities for conveying information. The use of Unicode in illustration of Bengali textual content material is additionally anticipated to facilitate uniform and hugely on hand platform. So, the Next stage is to purchase and decorate device and software. Robust, secured and reliable software application based on open supply and custom-made must be developed. Manage and support is a key state of affairs for the system and purposes which need to be cautiously handled. The integration of the facility to furnish remarks and other facts thru internet can also assurance the participation of residents in decision-making and a range of multidimensional service-oriented processes. The Next stage is IT Training. As a human being we don't like to go by using the use of a technological changing or new environment in most instances where we are no longer habituated. To be consumer satisfactory and habituated we need training and go step by using step. Provide applicable coaching courses to the officers/staff that enable them to work on pc buildings with the resource of way of the usage of a number of applications. To make the picks handy for the citizens' appropriate tutorials and directions two be given as necessary. Basic working ideas and kinds of services furnished with the aid of authorities ought to promote over the press media, television, radio etc. It will reason the awareness of the citizen about the blessings of the e-government.

#### **4.CONCLUSION**

By Conducting a familiar derivation and evaluation on the usefulness and effectiveness of the Information device implementation we generate the thought at the back of developing various e-services e.g. e-Administration, e-Democracy furnished here. A specific Information system mannequin required to enhance the e-government healthful for the Digital Bangladesh has been derived and analyzed in this paper. We in addition existing specific pointers for designing, growing and managing the e- authorities laptop in Bangladesh. The enchantment of e- authorities is the solely means left to elevate the united states into a corruption-free developed nation.

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